

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA

FRESENIUS USA, INC., et al.,

Plaintiffs,

v.

BAXTER INTERNATIONAL, INC., et al.,

Defendants.

No. C 03-1431 PJH

**FINDINGS OF FACT AND
CONCLUSIONS OF LAW; ORDER
RE MOTION FOR DECISION ON
LIMITED REMAND ISSUES**

This patent infringement case comes before the court following remand from the Federal Circuit for determination of post-verdict royalties.

Defendants and counterclaimants Baxter International, Inc. and Baxter Healthcare Corporation ("Baxter") filed a motion seeking a decision on limited remand issues, and plaintiffs and counterdefendants Fresenius Medical Care Holdings, Inc. and Fresenius USA, Inc. ("Fresenius") filed a response. On December 2, 2011, the court conducted an evidentiary hearing, including witness testimony, relating to Baxter's motion.

Having heard the testimony of the witnesses and evaluated other evidence in the record, and having considered the arguments of counsel, the court hereby enters the following findings of fact and conclusions of law with respect to post-verdict royalties.

PROCEDURAL BACKGROUND

This case commenced nearly nine years ago, in April 2003, with the filing by Fresenius of a complaint for declaratory judgment of invalidity and non-infringement, as to

1 U.S. Patent Nos. 6,248,131 (“the ’131 patent”), 5,247,434 (“the ’434 patent”), 5,744,027
2 (“the ’027 patent”), and 5,326,476 (“the ’476 patent”), all assigned to or owned by Baxter.
3 Baxter answered the complaint, and counterclaimed for infringement of each of those
4 patents.

5 On June 15, 2006, Fresenius admitted that its 2008K hemodialysis machine
6 infringed the asserted claims of the ’434, ’131, and ’027 patents. On June 16, 2006, the
7 Honorable Sandra Brown Armstrong, to whom the case was then assigned, entered
8 Baxter’s proposed judgment of partial infringement.

9 Beginning on June 19, 2006, Judge Armstrong presided over a jury trial on validity
10 and infringement. Fresenius asserted that each of the twenty asserted claims was invalid
11 as either obvious in light of prior art, or anticipated by prior art. The jury returned a verdict
12 on June 30, 2006, finding each of the twenty claims invalid and the two claims of the ’476
13 patent not infringed.

14 Baxter then moved for judgment as a matter of law (“JMOL”) and for a new trial. In
15 February 2007, Judge Armstrong granted Baxter’s motion for JMOL, ruling that there was
16 insufficient evidence to support the jury’s verdict that the asserted claims of the ’131, ’434,
17 and ’476 patents and claim 11 of the ’027 patent were invalid. Judge Armstrong also
18 granted Baxter a new trial on the jury’s finding that Fresenius had not infringed claims 5
19 and 7 of the ’476 patent, and ordered a second trial to determine damages. On the eve of
20 the new trial, Baxter dismissed the ’476 patent from the case.

21 In October 2007, Judge Armstrong presided over a second jury trial directed solely
22 to the issue of past damages. Baxter sought royalty damages of \$58 million for Fresenius’
23 sales of the 2008K machine between August of 2000 and October of 2007, and \$91 million
24 for Fresenius’ sales of unpatented disposable products used with those 2008K machines.
25 Baxter’s total royalty demand was for \$149 million. Fresenius proposed a total royalty
26 under three different theories, in amounts ranging from \$1.9 million to \$8.8 million.

27 After considering all the evidence, the jury awarded Baxter a total of \$14.266 million
28 – consisting of \$14.175 million for sales of the 2008K machine and \$91,000 for sales of

1 disposable products. The court entered judgment on November 7, 2007.

2 On November 20, 2007, Baxter filed a motion for a new damages trial, arguing that
3 the royalty rate applied by the jury was unsupported. In the order denying Baxter's motion,
4 Judge Armstrong noted that Fresenius and its damages expert had presented three distinct
5 methodologies for valuing the patented touchscreen feature. Judge Armstrong ruled that
6 "[e]ach of these methodologies provides an alternative estimate of the value that could
7 properly be attributed to the patents-in-suit, and each is supported by substantial evidence
8 that was properly before the jury." April 4, 2008 Order Denying Motion for New Trial, at 6.
9 Responding to Baxter's claims of jury passion and prejudice, Judge Armstrong further
10 observed that "[w]hile significantly less than Baxter argued for, \$14 million dollars is hardly
11 a nominal sum." Id. at 7.

12 Judge Armstrong also found that "[t]he evidence presented at trial fully supports the
13 jury's award of damages related to the non-patented disposables." Id. at 6. Judge
14 Armstrong cited to the "Royalty Base" jury instruction sponsored by Baxter, and ruled that
15 "the jury could have determined that Baxter should only be awarded a royalty on
16 disposables that were sold with the machines at the point of initial sale."

17 Judge Armstrong made specific citation to the trial record in support of her holding
18 that "the jury could properly have limited the royalty base by excluding the majority of the
19 disposables," and noted in addition that, since Fresenius had "vociferously argued" that
20 Baxter was not entitled to any royalty on disposables, the figure of \$91,000 was "'within the
21 range' proffered by the parties." Id. at 6-7. Baxter did not appeal the court's denial of its
22 motion for a new damages trial.

23 Baxter also moved for entry of a permanent injunction following the damages trial.
24 Baxter requested that the court order Fresenius to cease sales of the 2008K machine
25 within 60 days, and that it also impose a 10% royalty on 2008K machines sold during this
26 period. Baxter argued further that in the event the court denied the injunction, it should
27 impose an ongoing royalty of 7% on post-verdict sales of 2008K machines as well as on
28 sales of disposables, spare parts and service "linked" to those machines that were sold

1 after the verdict.

2 Fresenius opposed entry of a permanent injunction, but requested that, if the court
3 entered a permanent injunction, it also impose a “Transition Period” of nine months, so that
4 Fresenius would have sufficient time to replace the infringing touchscreen user input with a
5 non-infringing input. Fresenius offered to pay a royalty equal to the jury’s imputed royalty
6 rate during the nine-month period.

7 In its reply brief, Baxter agreed that Fresenius should be allowed a nine-month
8 Transition Period. However, in a new proposed order submitted with its reply, in addition to
9 a 10% royalty on “any Infringing Products that are sold during the Transition Period,” Baxter
10 proposed a 7% royalty on all disposables “linked” to sales of infringing products until the
11 expiration of the patents-in-suit.

12 On April 4, 2008, Judge Armstrong granted Baxter’s motion and permanently
13 enjoined Fresenius from selling the 2008K machine. As Baxter had agreed, Judge
14 Armstrong stayed the injunction for nine months, until January 1, 2009. She also adopted
15 the post-verdict royalty structure in Baxter’s second proposed order verbatim, ordering that
16 “Fresenius shall pay to Baxter an ongoing royalty of 10% of the sales price for any
17 Infringing Products that are sold during the Transition Period,” and that “Fresenius shall pay
18 a royalty of 7% of the sales price for all Disposable Products linked to sales of Infringing
19 Products from November 7, 2007 until expiration of the Patents-In-Suit.” Order Granting
20 Entry of Permanent Injunction, filed April 4, 2008, at 9. However, Judge Armstrong
21 provided no reasons for the award.

22 The parties agreed that Fresenius would deposit post-verdict royalty payments into
23 an escrow account, calculated using Baxter’s methodology, pending final resolution by the
24 courts of the post-verdict royalty issue.

25 Both parties appealed. Fresenius appealed the district court’s grant of JMOL, entry
26 of a permanent injunction, royalty award, and constructions of specified claim terms.
27 Baxter cross-appealed the jury’s determination that the asserted ’027 patent claims were
28 invalid as anticipated.

In an opinion issued September 10, 2009, the Federal Circuit reversed the grant of JMOL as to the '027 and '131 patents; rejected Baxter's cross-appeal as to the anticipated '027 patent claims; and sustained the JMOL as to claims 26-31 of the '434 patent. See Fresenius USA, Inc. v. Baxter Int'l, Inc., 582 F.3d 1288 (Fed. Cir. 2009). As a result, claims 26-31 of the '434 patent are the only claims remaining in the litigation.

In response to Fresenius' argument that the district court had abused its discretion by imposing an ongoing royalty without explaining the bases for its royalty rate determinations, the Federal Circuit stated,

We do not decide today whether the district court's royalty award was proper. Instead, we vacate the royalty award and remand for the district court to consider whether the previous award is proper in light of this court's modification of the district court's judgment. In particular, we note that our reversal of JMOL may affect the district court's consideration of the putative royalty rate that would result from a hypothetical negotiation between Baxter and Fresenius.

Id. at 1303. The court added that "[t]hat analysis is influenced by the Georgia Pacific factors, . . . and our decision here may affect how the district court weighs one or more of those factors." Id.

Following remand, Fresenius moved to stay the case pending resolution of the reexamination process for the '434 patent, the single remaining patent-in-suit. Fresenius also moved for a new trial to determine the appropriate damages for infringement of the '434 patent. Baxter filed a motion for decision on limited remand issues.

After Judge Armstrong's recusal, the case was reassigned to the undersigned on February 16, 2010. The case was administratively stayed until after the court had concluded then-pending proceedings in another case involving the same parties. On May 26, 2011, the court issued an order denying Fresenius' motion for stay pending the reexamination process,¹ and denying the motion for new trial. The court also ordered further briefing on Baxter's motion for decision on limited remand issues. The parties

¹ In July 2010, the Board of Patent Appeals and Interferences had affirmed the Patent and Trademark Office's final rejection of all remaining claims of the '434 patent. Baxter appealed to the Federal Circuit, which heard oral argument on February 8, 2012 (In re Baxter International, Case. No. 2011-1073).

1 submitted their respective re-briefing on the remand issues.

2 Baxter's position is that the Federal Circuit remanded the case solely so that this
3 court could determine whether the reversal of JMOL as to two of the patents-in-suit would
4 necessitate a revision of the royalty rate imposed by Judge Armstrong in the permanent
5 injunction. Baxter contends that the court should continue to apply the same rates that
6 were imposed by Judge Armstrong, because the royalty analysis in this case did not
7 depend on the number of asserted patents.

8 Baxter argues that because all of the asserted claims in the three patents-in-suit at
9 trial covered a "hemodialysis machine" with a "touchscreen interface," any single claim from
10 even one patent would have blocked Fresenius from selling its infringing 2008K machine
11 (the only accused product). In addition, Baxter notes, this court found in its May 26, 2011
12 order denying Fresenius' motion for a new trial that Fresenius had never argued that the
13 number of patents or claims infringed had any impact on the reasonable royalty analysis.

14 Baxter contends that this is not the typical ongoing royalty case where a royalty was
15 awarded in lieu of an injunction. Rather, according to Baxter, this is a unique situation
16 where an injunction was appropriate and the adjudicated infringer (Fresenius) pleaded for,
17 and was given, a limited Transition Period to design-around to prevent a "parade of
18 horrors," and royalties were awarded to compensate Baxter for its losses during that
19 period.

20 Fresenius' position is that the amount that Baxter is seeking in royalties is improper,
21 in part because it is significantly greater than the jury's award. Fresenius asserts that while
22 Baxter does not actually set forth the dollar amount of royalties that would result from its
23 proposal, it is clear that under Baxter's plan, Fresenius would be obligated to pay
24 approximately \$25 million in royalties for nine months of 2008K sales, plus an additional
25 \$95 million in royalties for unpatented disposable products.

26 Fresenius contends that nothing about this is "reasonable." What would be
27 reasonable, Fresenius argues, would be a royalty of no more than 1.5 times the jury's
28 imputed royalty for sales of the 2008K machines during the 9-month Transition Period.

1 This would yield a per machine royalty of no more than \$360.32, which, when multiplied by
2 the 19,369 2008K machines sold during the Transition Period, would result in a total royalty
3 award of \$6,979,038. Fresenius also urges that no royalty be imposed for sales of
4 unpatented disposables.

5 On December 2, 2011, the court conducted an evidentiary hearing. Following the
6 hearing, on January 26, 2012, the parties submitted proposed findings of fact and
7 conclusions of law.

8 FINDINGS OF FACT

9 When a person's kidneys fail to function properly, a hemodialysis ("HD") machine
10 can function in place of the kidneys to cleanse the blood of toxins. Fresenius, 582 F.3d at
11 1291-92. During hemodialysis, the patient's blood is pumped through an HD machine,
12 which contains a "dialysate" – a solution that draws out toxins from the blood. Id. at 1292.
13 During this process, the blood is separated from the dialysate by a semi-permeable
14 membrane that allows toxins to pass from the blood into the dialysate. Id.

15 At the hearing, Martin Crnkovich, the lead engineer on the team that developed the
16 Fresenius HD machine accused of infringing Baxter's patents, testified that while each
17 Fresenius HD machine built on the previous generation HD machine, the basic parts of an
18 HD machine are the same, and include the hydraulics, the blood handling circuit, blood
19 pumps, a heparin pump, a level detector, and a user interface.

20 All of the patents originally at issue in this suit derived from a parent patent
21 application filed in 1991, and all of the relevant claims – including the claims of the '434
22 patent – were "directed to a hemodialysis machine integrated with a touchscreen user
23 interface." Id.

24 At the time the '434 patent issued, kidney dialysis machines were well-known in the
25 art. See '434 Patent, 1:10. At that time, touchscreens had been used on other medical
26 devices, but a touchscreen had not been integrated with an HD machine. Fresenius, 582
27 F.3d at 1292. Instead, HD machines were controlled by one-way displays and a
28 combination of knobs, toggles, and switches. The addition of the touchscreen feature

1 served to make the process easier. Fresenius' CEO Dr. Ben Lipps testified that the
2 touchscreen interface was a convenience feature that was unrelated to the core purpose of
3 the HD machine.

4 The "System 1000," which embodied the patents originally at issue in this case, was
5 introduced by Althin Medical in 1991 and was a commercial success. In 1998, Fresenius
6 introduced the allegedly infringing 2008K, an HD machine with a touchscreen interface.
7 Baxter purchased Althin Medical and the patents at issue in March 2000. Fresenius, 582
8 F.3d at 1292.

9 The Fresenius 2008H, the predecessor of the 2008K, did not include a touchscreen
10 user interface. While the touchscreen interface was well-received, there is no evidence
11 that convenience was the major driver in HD machine sales. Baxter's expert R. Bruce Den
12 Uyl could not identify any evidence that any clinic or individual purchased a 2008K machine
13 because it had a touchscreen on it. Although Rice Powell, the CEO of Fresenius Medical
14 Care North America, testified in his deposition that there was a demand by users of HD
15 machines for a machine with a touchscreen user interface, the market evidence showed
16 that treatment efficacy and reliability, rather than a touchscreen interface, were the primary
17 drivers of HD machine sales.

18 The sale of HD machines drives the sale of unpatented "disposables" – associated
19 products required as part of the dialysis process, but which are not sold as a physical part
20 of the dialysis machine. These products, which are truly "disposable" in the sense that they
21 cannot be re-used from patient to patient, include dialyzers, bloodlines, needles, and
22 various concentrates and chemicals. Fresenius sells disposables. The testimony and
23 other evidence demonstrated that Fresenius' disposables are interchangeable, in that any
24 HD machine can use any brand of disposables. That is, Fresenius' disposables can and
25 are used both with Fresenius' HD machines and with those of its competitors, and
26 Fresenius' HD-machine customers can purchase disposables from suppliers other than
27 Fresenius.

28 The Ninth Circuit found that Judge Armstrong had acted within her discretion in

1 imposing royalties on “post-verdict sales of disposables linked to machines sold pre-
2 verdict.” Id., 582 F.3d at 1303 (emphasis added). Nevertheless, it is unclear from either
3 the order granting the permanent injunction, or the Federal Circuit’s remand, exactly what,
4 as a factual matter, constitutes a “linked” disposable subject to a royalty. At the December
5 2, 2011 hearing, Mr. Den Uyl referred to “linked” disposables as “disposables that are sold
6 with the 2008K machine,” or are “associated with” the 2008K.

7 Mr. Den Uyl also testified that “linked” disposables are disposables that are “sold to
8 the same customers that own the 2008K,” although “[i]t could be at different times,” rather
9 than at the same time. Indeed, he conceded that while the same 2008K machine might be
10 in use for seven or more years, a clinic or hospital using an HD machine would have to
11 purchase disposables on a weekly basis.

12 There is no evidence that any of the disposables for which Baxter is seeking a
13 royalty were actually “sold with” the 2008K machine, and the unrebutted evidence actually
14 showed that Fresenius’ disposables were not sold at the “point of sale” with the 2008K.
15 While there was evidence that Fresenius offered a volume discount for “bundled”
16 disposables, it was clear from the testimony of Fresenius’ CEO Dr. Lipps, as well as from
17 the testimony of Fresenius’ expert Daniel Rubinfeld, that “bundling” referred to volume
18 sales of disposables, not to sales of disposables that were somehow linked to – or
19 dependent on – the sale of the 2008K machine.

20 CONCLUSIONS OF LAW

21 On remand, the court must determine de novo a reasonable royalty to compensate
22 Baxter for Fresenius’ sales of infringing 2008K HD machines during the nine-month
23 Transition Period, from April 4, 2008, to January 1, 2009 (the effective date of the
24 injunction); and for the sales of disposables from November 7, 2007 (the date of entry of
25 judgment) until the expiration of the ‘434 patent in April 2011.

26 Baxter suggests that the Federal Circuit affirmed Judge Armstrong’s prior royalty
27 award, and this court has only two tasks on remand – to determine whether the Federal
28 Circuit’s reversal of JMOL (and the invalidation of two of the three patents-in-suit) affects

1 the previous ongoing royalty award of 10% of sales of infringing machines, and to
2 determine whether the Federal Circuit's reversal affects the previous ongoing royalty award
3 of 7% on disposables linked to infringing machine sales. The court disagrees.

4 The Federal Circuit stated, "We do not decide today whether the district court's
5 royalty award was proper." Fresenius, 582 F.3d at 1303. In other words, the Federal
6 Circuit did not affirm the prior ongoing royalty award. Nor did it make any determination as
7 to whether the award was proper. Instead, the Federal Circuit unambiguously vacated the
8 royalty award. In so doing, the Federal Circuit noted that the order granting the permanent
9 injunction had provided no reason for adopting Baxter's royalty proposal. See id. at 1294
10 ("The district court imposed the royalty rates without explaining the bases for its
11 calculations.").

12 The Federal Circuit has repeatedly explained that a district court must provide a
13 clear statement of reasons underlying any award of a post-verdict royalty. See, e.g.,
14 Amado v. Microsoft Corp., 517 F.3d 1353, 1362 (Fed. Cir. 2008) (because district court
15 failed to consider post-judgment factors, Federal Circuit was unable to determine whether
16 award of post-judgment royalty was reasonable exercise of discretion); Paice LLC v.
17 Toyota Motor Corp., 504 F.3d 1293, 1315 (Fed. Cir. 2007) (because district court provided
18 no reasoning to support particular ongoing royalty rate, Federal Circuit was unable to
19 determine whether the district court abused its discretion in setting rate).

20 Thus, this court reads the Federal Circuit's remand as directing this court to
21 determine a reasonable royalty rate, as to infringing machines for the period from April 4,
22 2008 until January 1, 2009, and for disposable products, for the period from November 7,
23 2007, until the date of expiration of the '454 patent, and to articulate the reasons for that
24 determination.

25 The court further concludes that the Federal Circuit intended that this court should
26 consider, as part of its analysis, whether and to what extent the denial of JMOL should
27 have on the determination of a reasonable royalty rate, and how the Georgia-Pacific factors
28 should apply, if at all.

1 A patentee is entitled to “damages adequate to compensate for the infringement, but
2 in no event less than a reasonable royalty.” 35 U.S.C. § 284.

3
4 A reasonable royalty can be calculated from an established royalty, the
5 infringer's profit projections for infringing sales, or a hypothetical negotiation
6 between the patentee and infringer based on the factors in Georgia-Pacific
7 Corp. v. U.S. Plywood Corp., 318 F.Supp. 1116, 1120 (S.D.N.Y. 1970).
8 Lucent Techs. v. Gateway, Inc., 580 F.3d 1301, 1324 (Fed. Cir. 2009); Minks
9 v. Polaris Indus., 546 F.3d 1364, 1372 (Fed. Cir. 2008). The hypothetical
10 negotiation “attempts to ascertain the royalty upon which the parties would
11 have agreed had they successfully negotiated an agreement just before
12 infringement began,” and “necessarily involves an element of approximation
13 and uncertainty.” Lucent, 580 F.3d at 1324–25 (citation omitted).

14 Wordtech Sys., Inc. v. Integrated Network Solutions, Inc., 609 F.3d 1308, 1319 (Fed. Cir.
15 2010); see also Uniloc USA, Inc. v. Microsoft Corp., 632 F.3d 1292, 1311-19 (Fed. Cir.
16 2011); Finjan, Inc. v. Secure Computing Corp., 626 F.3d 1197, 1207-12 (Fed. Cir. 2010).

17 Here, there is no evidence of any established royalty for the patent in question, and
18 no evidence of Fresenius' profit projections for infringing sales. A reasonable royalty can
19 also be derived, based on a hypothetical negotiation between the patentee and the
20 infringer, by “envision[ing] the terms of a licensing agreement reached as the result of a
21 supposed [bargain] between the patentee and the infringer at the time infringement began.”
22 Minks, 546 F.3d at 1372; see also Mahurkar v. C.R. Bard, Inc., 79 F.3d 1572, 1579 (Fed.
23 Cir. 1996). This hypothetical negotiation “necessarily involves an element of approximation
24 and uncertainty.” Lucent, 580 F.3d at 1325.

25 In determining the reasonable royalty that would have been agreed to during a
26 hypothetical negotiation, parties in patent cases frequently utilize the fifteen factors
27 enunciated in Georgia-Pacific Corp. v. U.S. Plywood Corp., 318 F.Supp. 1116, 1120
28 (S.D.N.Y. 1970). The Federal Circuit has expressly “sanctioned the use of the Georgia-
Pacific factors to frame the reasonable royalty inquiry.” Uniloc, 632 F.3d at 1317. Here, at
the trial, Baxter sought a hypothetically negotiated royalty, and the jury was instructed on
that theory alone, including the instruction that “you may consider evidence of any of the
[Georgia-Pacific factors].” Jury Instructions, filed October 30, 2007, at 13.

In Georgia-Pacific, the court set forth a non-exclusive list of “evidentiary factors” that

it considered to be “relevant, in general, to the determination of a reasonable royalty for a patent license” –

1. The royalties received by the patentee for the licensing of the patent in suit, proving or tending to prove an established royalty.
2. The rates paid by the licensee for the use of other patents comparable to the patent in suit.
3. The nature and scope of the license, as exclusive or non-exclusive; or as restricted or non-restricted in terms of territory or with respect to whom the manufactured product may be sold.
4. The licensor's established policy and marketing program to maintain his patent monopoly by not licensing others to use the invention or by granting licenses under special conditions designed to preserve that monopoly.
5. The commercial relationship between the licensor and licensee, such as, whether they are competitors in the same territory in the same line of business; or whether they are inventor and promoter.
6. The effect of selling the patented specialty in promoting sales of other products of the licensee; that existing value of the invention to the licensor as a generator of sales of his non-patented items; and the extent of such derivative or convoyed sales.
7. The duration of the patent and the term of the license.
8. The established profitability of the product made under the patent; its commercial success; and its current popularity.
9. The utility and advantages of the patent property over the old modes or devices, if any, that had been used for working out similar results.
10. The nature of the patented invention; the character of the commercial embodiment of it as owned and produced by the licensor; and the benefits to those who have used the invention.
11. The extent to which the infringer has made use of the invention; and any evidence probative of the value of that use.
12. The portion of the profit or of the selling price that may be customary in the particular business or in comparable businesses to allow for the use of the invention or analogous inventions.
13. The portion of the realizable profit that should be credited to the invention as distinguished from non-patented elements, the manufacturing process, business risks, or significant features or improvements added by the infringer.
14. The opinion testimony of qualified experts.
15. The amount that a licensor (such as the patentee) and a licensee (such as the infringer) would have agreed upon (at the time the infringement began) if both had been reasonably and voluntarily trying to reach an agreement; that

1 is, the amount which a prudent licensee – who desired, as a business
2 proposition, to obtain a license to manufacture and sell a particular article
3 embodying the patented invention – would have been willing to pay as a
4 royalty and yet be able to make a reasonable profit and which amount would
have been acceptable by a prudent patentee who was willing to grant a
license.

5 Id., 318 F.Supp. at 1120.

6 The Federal Circuit has held that in some circumstances a district court may
7 properly order an accused infringer to pay an ongoing royalty in lieu of imposing a
8 permanent injunction. See Paice, 504 F.3d at 1314. In the present case, of course, the
9 court did impose an injunction, but stayed it for nine months to allow Fresenius to complete
10 the design-around to eliminate the infringing touchscreen from its HD machine.

11 In any event, because pre-suit and post-judgment acts of infringement are distinct,
12 different royalty rates may be warranted “given the change in the parties’ legal relationship
13 and other factors.” Amado, 517 F.3d at 1361-62 (citation and quotation omitted). Thus, in
14 cases requiring the determination of a proper ongoing royalty rate, the court conducts an
15 analysis under a “modified” Georgia-Pacific framework, based on the difference (if any)
16 between pre-suit and post-judgment acts of infringement. See id., 517 F.3d at 1361-63.

17 Baxter argues that the relevant Georgia-Pacific factors support the royalty award set
18 forth in the prior order granting the permanent injunction. In addition, at the hearing, Baxter
19 provided testimony from its expert Mr. Den Uyl, relating to what he considered to be the
20 relevant Georgia-Pacific factors.

21 First, Baxter contends that Fresenius’ need for the patented technology of its main
22 competitor confirms the court’s royalty rates. Baxter asserts that Fresenius’ position
23 following the jury verdict was that without a license to the ‘434 patent, both its business and
24 its business reputation would have suffered significant harm. Baxter argues that this
25 evidence relates to Georgia-Pacific factor 5 (whether licensor and licensee are competitors
26 in same territory in same line of business), factor 4 (licensor’s established policy of not
27 licensing, or of licensing only under special conditions), factor 11 (extent to which infringer
28 has made use of invention); factor 8 (established profitability of product made under patent,

1 its commercial success and current popularity); and factor 9 (utility and advantages of
2 patent property over old modes and devices, if any, used for working out similar results).

3 Baxter also argues that industry license agreements confirm the royalty award,
4 which evidence relates to Georgia-Pacific factor 2 (rate paid by the licensee for the use of
5 other patents comparable to the patent-in-suit); and factor 12 (portion of the profit or selling
6 price that may be customary in the particular business or in comparable businesses to
7 allow for use of the invention or an analogous invention). Baxter asserts that the evidence
8 presented supports an “absolute floor” of 4%, and that an analysis of all the Georgia-
9 Pacific factors shows that the court’s prior award (10% on machines and 7% on
10 disposables) was appropriate.

11 Finally, Baxter asserts that Fresenius’ reliance on the jury verdict is “flawed,” as the
12 Federal Circuit has consistently rejected the argument that a pre-verdict royalty is the same
13 as a post-verdict royalty. In support, Baxter cites as an example the Federal Circuit’s
14 decision in Amado.

15 In Amado, the Federal Circuit noted that prior to judgment, liability for infringement,
16 as well as validity, are uncertain, and “damages are determined in the context of that
17 uncertainty.” Id., 517 F.3d at 1362. Post-judgment, however, “the calculus is markedly
18 different because different economic factors are involved.” Id. Accordingly, while this is not
19 a case where liability for infringement was uncertain prior to judgment – as Fresenius had
20 stipulated prior to trial that its 2008K machine infringed Baxter’s patents – the court agrees
21 that it must as a general principle consider “changed circumstances” since the time of
22 judgment.

23 Baxter submits that the “changed circumstances” include the fact that post-verdict,
24 Baxter was found to be entitled to injunctive relief, which it claims supports a royalty within
25 the market range (which Baxter contends ranges between 4% and 25%). In addition,
26 Baxter argues, Fresenius admitted for the first time during post-trial briefing that it had no
27 immediate way to design around the infringing touchscreen, and that it would take at least
28 nine months for it to develop a design-around. Its only non-infringing alternative – the

1 2008H machine, which preceded the infringing 2008K machine – had been discontinued
2 and was obsolete.

3 Baxter asserts that because Fresenius had no non-infringing alternative, and
4 because Fresenius argued in opposition to Baxter's motion for a permanent injunction that
5 the nine-month Transition Period was necessary because an immediate injunction would
6 destroy its business and be harmful to patients, changed circumstances support the court's
7 prior royalty award.

8 For its part, Fresenius argues that the "changed circumstances" include the fact that
9 the Federal Circuit found that the asserted claims in two of the three patents-in-suit were
10 invalid; the fact that as of 2007 Baxter had stopped making HD machines, and thus the
11 parties are no longer direct competitors in the hemodialysis market; and the fact that Baxter
12 agreed to the stay and, consequently, was aware that infringing machines would be sold
13 during the Transition Period. In addition, Fresenius asserts, while Baxter's expert opined at
14 trial that the licenses he relied on supported a royalty rate up to 25%, he conceded at the
15 evidentiary hearing that none of those licenses is comparable to a license to the '434
16 patent.

17 As indicated above, in the October 2007 damages trial, Baxter sought a 7% royalty,
18 or \$58 million on sales of 2008K machines pre-judgment, and \$91 million on sales on
19 unpatented disposables. Baxter's expert based his opinion as to the reasonable royalty
20 rate on various of the Georgia-Pacific factors.

21 The jury considered all the evidence and awarded Baxter a lump-sum royalty of
22 \$14.175 million on sales of machines (24.4% of what Baxter had requested, and an amount
23 that resulted in a royalty rate of 1.7%, or \$240.21 per machine sold during the Transition
24 Period), and \$91,000 on sales of disposables (0.1% of what Baxter had requested, and an
25 amount that resulted in a royalty rate of 0.007%). The jury evidently did not accept Baxter's
26 conclusions based on its application of the Georgia-Pacific factors.

27 The court finds the amount of the jury's award to be significant as a starting point for
28 the analysis as to whether a post-verdict royalty rate of 10% for machines and 7% for

1 disposables is reasonable. While the court cannot simply apply the jury's pre-verdict
2 royalty award to the post-verdict infringement, without considering the impact of changed
3 circumstances, the Federal Circuit made clear in Paice that the district court was not
4 precluded from adopting an amount equivalent to the jury's royalty award for post-verdict
5 purposes. Paice, 504 F.3d at 1315.

6 In addition, the court considers any changed circumstances between a hypothetical
7 negotiation that occurred in 1998 (which the jury determined) and a hypothetical negotiation
8 that would occur in 2007 after the judgment or in 2008 during the Transition Period (which
9 this court is determining), as modified by the Federal Circuit's invalidation of two of the
10 three patents-in-suit.

11 In this regard, the court finds that the following circumstances should be considered
12 in determining an appropriate royalty rate:

13 • The Federal Circuit's ruling regarding the invalidity of two of the three patents-
14 in-suit tends to lower the amount of the royalty to which Baxter and Fresenius would
15 hypothetically have agreed. Baxter argues that the Federal Circuit's ruling should have no
16 effect on the parties' hypothetical post-verdict negotiations, because all the patents-in-suit
17 covered an HD machine with a touchscreen user interface, and because the jury did not
18 award damages on a patent-by-patent basis. The court finds, however that one result of
19 the Federal Circuit's ruling is that the "duration of the patent" (Georgia-Pacific factor 7) is
20 shortened by four years – from April 2015 (when the invalid '027 patent would have
21 expired) to April 2011 (when the '434 patent expired).

22 In addition, with the broadest claim (claim 11 of the '027 patent) invalidated, the
23 "nature of the patented invention" was significantly narrowed. Thus, in the hypothetical
24 negotiation, Fresenius would have considered whether there was a need to design around
25 the narrower '434 patent.

26 Fresenius' lead engineer Mr. Crnkovich testified at the hearing that he and his team
27 began working on a design-around to the '434 patent in June 2006, and that as of the end
28 of 2007, it was ready to go. Had the '434 patent been the only patent at issue at the time of

the damages trial and the order granting the permanent injunction, either there would have been no need for the Transition Period, or the period could have been less than nine months, and hence, there would have been no or fewer sales of “the patented specialty” or “product made under the patent,” and no or fewer profits gained by Fresenius from selling the patented invention (Georgia-Pacific factors 6, 8, 12, 13). In addition, the patented invention would have had less utility, advantage, or benefit to Fresenius (Georgia-Pacific factors 9, 10). These facts tend to lower the royalty amount to which the parties would have agreed.

- As of 2007, Baxter was no longer a competitor for production and sales of products incorporating the patented feature. While it is true, as Baxter argues, that Baxter and Fresenius remain competitors in the dialysis market, the fact that they were no longer competitors in the market for machines using the patented feature is marginally relevant to Georgia-Pacific factor 5 and tends to lower the royalty amount that Baxter and Fresenius would have agreed to.

- Baxter agreed that the court should stay the injunction for nine months so that Fresenius could remove the infringing touchscreen feature from the 2008K machine. Both the Federal Circuit and the district court in Amado recognized this as an important factor in determining the post-verdict royalty. The Federal Circuit stated:

This is not a case like Paice, however, where the court’s task was to assess an appropriate level of damages for ongoing infringement under circumstances in which an injunction was not warranted. Here, Microsoft was enjoined from further infringing activity yet was permitted to continue only by virtue, and with the imprimatur, of the court-ordered stay.

Amado, 517 F.3d at 1362 (emphasis in original).

The court also noted that in a case involving a stayed injunction, one factor of particular importance is “the parties’ reasonable expectations if the stay was entered by consent or stipulation[.]” Id. On remand, the district court found that the factors in support of a stay “greatly lessened any bargaining advantage that Amado derived from a finding of infringement and injunction.” Amado, 2008 WL 8641264, at *10. Because of the stay, “Microsoft did not have pressure to enter into a licensing agreement with Amado for the

1 hold-out value that Amado now seeks.” Id.

2 In this case, however, the stay was imposed at Fresenius’ request, to allow it time to
3 complete the design-around. Fresenius argued that an injunction could destroy its
4 business, shut down factories, and/or lead to massive lay-offs, and that it would also harm
5 patients. These circumstances would seem to have increased Baxter’s bargaining position
6 in the hypothetical negotiation in late 2007, and would tend to raise the royalty amount to
7 which the parties would have agreed.

8 • Fresenius complied with the court’s injunction, introduced a non-infringing
9 HD machine, and experienced no drop in its sales of HD machines or disposables. This
10 real-world marketplace evidence is relevant to Georgia-Pacific factors 6, 8-13 and 15 and
11 suggests that the patented touchscreen user input had little, if any, value in driving the
12 sales of the 2008K machines and the disposables.

13 • The Federal Circuit’s requirement in its more recent decisions that the
14 licenses relied upon by the patentee must be comparable to the hypothetical license at
15 issue, and that the burden of providing this evidence rests on the patentee, see
16 ResQNet.com, Inc. v. Lansa, Inc., 594 F.3d 860, 872-73 (Fed. Cir. 2010); Lucent, 580 F.3d
17 at 1327-28, is relevant to Georgia-Pacific factors 1 and 2, and tends to lower the royalty
18 amount that Baxter and Fresenius would have agreed to.

19 Although Baxter’s damages expert Mr. Den Uyl testified at the damages trial that the
20 licenses he relied on supported a royalty rate up to 25%, he admitted at the December 2,
21 2011 hearing that none of those licenses was comparable to a license to the ’434 patent.
22 In his view, the licenses were nonetheless relevant to show the market range of license
23 amounts.

24 While the court accepts that the evidence showed license royalties ranging from 4%
25 to 25%, the Federal Circuit has made clear that damages experts cannot use
26 noncomparable licenses, with little relationship to the claimed invention or patents-in-suit,
27 as a basis for calculating reasonable royalties. See ResQNet, 594 F.3d at 870. This
28 changed circumstance favors Fresenius.

In addition, district courts following Paice and Amado which have considered post-verdict royalties have generally enhanced the jury's royalty by no more than four times, and usually less. See, e.g., Affinity Labs of Texas, LLC v. BMW North America, LLC, 783 F.Supp. 2d 891 (E.D. Tex. 2011); Presidio Components Inc. v. American Tech. Ceramics Corp., 2010 WL 3070370 (S.D. Cal. Aug. 5, 2010); Creative Internet Advertising Corp. v. Yahoo! Inc., 674 F. Supp. 2nd 847 (E.D. Tex. 2009); Paice LLC v. Toyota Motor Corp., 609 F. Supp. 2nd 620 (E.D. Tex. 2009); Boston Scientific Corp., v. J & J, 2009 WL 975424 (N.D. Cal. Apr. 9, 2009). Moreover, Baxter's demanded increase over the jury's verdict is significantly greater than any enhanced post-verdict royalty ever granted by a court that has stayed or denied an injunction.

- Finally, in the time since Judge Armstrong considered the post-verdict royalty issue, the Federal Circuit has issued significant decisions relating to the entire market value rule. "The entire market value rule allows a patentee to assess damages based on the entire market value of the accused product only where the patented feature creates the 'basis for customer demand' or 'substantially create[s] the value of the component parts.'" Uniloc, 632 F.3d at 1318 (quoting Lucent, 580 F.3d at 1336).

This rule is derived from Supreme Court precedent requiring that "the patentee . . . must in every case give evidence tending to separate or apportion the defendant's profits and the patentee's damages between the patented feature and the unpatented features, and such evidence must be reliable and tangible, and not conjectural or speculative," or show that "the entire value of the whole machine, as a marketable article, is properly and legally attributable to the patented feature."

Id. (quoting Garretson v. Clark, 111 U.S. 120, 121 (1884)); see also Funai Elec. Co. Ltd. v. Daewoo Electronics Corp., 616 F.3d 1357, 1375-76 (Fed. Cir. 2010).

Here, there is no evidence that the touchscreen user input "created the basis for customer demand," or "substantially created the value of the component parts" of the 2008K machine. The real-world, marketplace evidence demonstrates that the touchscreen user input did not substantially create the value of the 2008K machine.

For example, the evidence showed that Baxter's "System 1000/Tina" touchscreen machine competed for years with the Fresenius 2000H machine, which did not have a

1 touchscreen. Indeed, the 2000H machine outsold the System 1000 by almost 4 to 1. Nor
2 did Fresenius suffer any loss in sales of HD machines after it switched from the 2008K
3 machine (with touchscreen) to the 2008K2 machine (without touchscreen), even though HD
4 machines with a touchscreen interface are available from another company. Such market
5 data alone defeats the application of the entire market value rule. See, e.g., Amado v.
6 Microsoft Corp., 2008 WL 8641264 at *11 (C.D. Cal. Dec. 4, 2008).

7 Thus, a royalty award for the 2008K machines sold during the Transition Period
8 must be calculated based on an apportionment of value between patented and unpatented
9 features of the “whole machine.” Uniloc, 632 F.3d at 1318-21; Lucent, 580 F.3d at 1337-
10 38. The Federal Circuit’s limitation on the application of the entire market value rule is
11 relevant to Georgia-Pacific factors 6, 8-13, and 15, and tends to lower the royalty amount
12 that Baxter and Fresenius would have agreed to.

13 In this case, considering the totality of the changed circumstances since jury verdict
14 – the difference in the number of years of patent life, based on invalidation of two of the
15 three patents-in-suit; the difference in the value of competition, given Baxter’s withdrawal
16 from the HD machine production market; and the fact that the licenses relied on by Baxter
17 were not comparable to the hypothetical license – the court finds that a royalty demand of
18 10% of the sales of 2008K machines during the Transition Period is neither equitable nor
19 reasonable.

20 Fresenius’ expert Dr. Rosenfeld calculated that a reasonable multiplier would be in
21 the 1.5 range, and that in any event (even without any changed circumstances), would not
22 exceed three times the rate implied by the jury. In light of the above analysis, and given
23 that a majority of the Georgia-Pacific factors favor Fresenius’ position, the court finds that
24 an award of no more than two times the jury’s imputed award is fair and reasonable.

25 With regard to the royalty for unpatented disposable products, Baxter suggests that
26 the Federal Circuit ruled that the court must include a royalty on those products in the
27 post-verdict award. This characterization is not entirely accurate. On appeal, Fresenius
28 argued as a purely legal matter that 2008K machines sold prior to the jury’s verdict were

1 licensed by the damages award, so no further royalty could attach to the disposables used
2 by those machines following the verdict. Fresenius, 582 F.3d at 1303. In response, the
3 Federal Circuit ruled that the district court acted within its discretion in imposing a royalty on
4 disposables used with pre-verdict machines. Id.

5 Fresenius contends that because the order granting the motion for preliminary
6 injunction did not articulate the reasons for the award, the Federal Circuit has never
7 considered the issue of whether the district court should include a royalty on unpatented
8 disposable products under the facts of this case. Without attempting to parse the Federal
9 Circuit's order and articulated basis for the remand, this court finds the decision of the
10 Federal Circuit to be that a royalty on disposables may be appropriate under the facts of
11 this case, and that it is up to this court to determine whether such a royalty should be
12 imposed and in what amount, and to explain its reasons for doing so.

13 Both Judge Armstrong's order and the Federal Circuit's discussion of that order
14 referred to a royalty for post-verdict sales of disposables "linked to" sales of machines.
15 However, there appears to be no evidence before the court regarding such linkage of sales
16 of disposables to sales of 2008K machines.

17 In particular, since unpatented products may not be included in the royalty base
18 unless the patentee proves that the patented feature is the "basis for customer demand" of
19 those unpatented products, see Uniloc, 632 F.3d at 1318, and since Baxter provided no
20 evidence that any customer ever purchased a particular disposable product from Fresenius
21 because its 2008K machine used a touchscreen input, the court finds no basis for awarding
22 a royalty for sales of disposables that exceeds the effective royalty applied by the jury in its
23 damages award.

24 Finally, the court notes that the Federal Circuit stated that "[a] damages award for
25 pre-verdict sales of the infringing product does not fully compensate the patentee because
26 it fails to account for post-verdict sales of repair parts." Fresenius, 582 F.3d at 1303
27 (emphasis added) (citation omitted). However, the evidence of the record shows that
28 dialyzers, needles, bloodlines, concentrates, and other disposables are distinct medical

1 products used with many different HD machines. They are not “spare” or “repair” parts for
2 the 2008K machine.

3 Indeed, the jury was instructed that Baxter was seeking “a reasonable royalty on
4 Fresenius’ sale of its 2008K kidney dialysis machine, spare parts and maintenance
5 services, as well as certain disposable products . . . sold by Fresenius for use with the
6 2008K.” Jury Instructions, at 15. In other words, the instructions clearly distinguished
7 between disposables on the one hand, and machines and spare parts on the other.

8 The jury was further instructed that “if Baxter demonstrates that the 2008K machine
9 and the unpatented components or disposables are part of a single assembly, or part of a
10 complete machine, or constitute a functional unit, you may award damages for those
11 disposables or unpatented components.” Id.

12 In light of these instructions, the court finds it reasonable to conclude that in
13 awarding Baxter \$91,000 for disposables – one-thousandth of the \$91 million that Baxter
14 had been seeking – the jury determined either that only one-thousandth of the disposables
15 sold by Fresenius were sold “for use with the 2008K,” which appears to have approximately
16 the same meaning as “linked to sales of the 2008K;” or that the disposables sold by
17 Fresenius did not make up a “single assembly,” a “complete machine,” or a “functional unit”
18 with the 2008K.

19 Whichever it was, this court finds nothing in the record, as viewed through the
20 Georgia-Pacific factors, to warrant reverting to a 7% royalty for disposables, post-verdict,
21 compared with the award of the jury, which amounted to a royalty of 0.007%. In other
22 words, Baxter, in arguing for a 7% royalty on disposables, is seeking exactly the same
23 royalty it previously sought for past infringement, and which was firmly rejected by the jury.

24 While it is true that the Federal Circuit has held that “[t]here is a fundamental
25 difference . . . between a reasonable royalty for pre-verdict infringement and damages for
26 post-verdict infringement,” Amado, 517 F.3d at 1361, the district court is also free to
27 conclude that the amount awarded by the jury for past infringement was the appropriate
28 amount, see Paice, 504 F.3d at 1315.

CONCLUSION

Prior to the Federal Circuit's remand for consideration of post-verdict royalties, Baxter requested and the court ordered royalties of 10% of the sales price of any infringing products – i.e., the infringing 2008K HD machines – that were sold during the Transition Period; and 7% of the sales price of all disposable products “linked to sales of” the infringing products from November 7, 2007 (date of entry of jury verdict) until the expiration of the patents-in-suit.

In determining on remand whether the previously imposed, or any royalty rates, are warranted, this court is disadvantaged by not having had the experience of sitting through the two trials in this case. Perhaps had this court presided at the trials, the reasonableness of the royalties that Baxter seeks might be apparent. However, based on the evidence presented during these remand proceedings and the evidence elucidated by the parties from the trial records, the court cannot conclude, for the reasons stated above, that it supports the royalty rate that Baxter seeks.

In particular, none of the licenses relied on by Baxter are applicable under ResQNet and Lucent, and therefore there is insufficient support for the particular royalty rate Baxter seeks; and Baxter has used the entire sales price of the 2008K machines and the unpatented disposables as the royalty base, which is inappropriate under Lucent and Uniloc.

It is therefore ORDERED that Fresenius shall be liable to Baxter for an amount equal to 3.4 % of the sales of the 2008K HD machines in royalty payment for sales of infringing 2008K machines during the Transition Period. Such a computation results in a per machine royalty of no more than $\$240.21 \times 2 = \480.42 , and a total royalty of no more than $\$480.42 \times 19,369$ (the number of 2008K machines sold during the Transition Period) = $\$9,305,254.98$. Fresenius shall be further liable to Baxter for an amount equal to 0.007% of the sales price of disposables during the period from November 7, 2007 until April 2011, the date of expiration of the '434 patent.

IT IS FURTHER ORDERED that, no later than March 15, 2012, the parties shall

1 submit a stipulation regarding the amount that Fresenius shall leave in the existing escrow
2 as security for this award, plus future interest. If the parties believe a judgment is
3 necessary, they shall jointly submit a proposed form of judgment, also no later than March
4 15, 2012.

5
6 **IT IS SO ORDERED.**

7 Dated: March 8, 2012



PHYLLIS J. HAMILTON
United States District Judge